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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/687,508	10/15/2003	Peijun Jiang	2002B140/2	9030

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EXAMINER

LU, C CAIXIA

ART UNIT PAPER NUMBER

1713

DATE MAILED: 08/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/687,508	JIANG ET AL.	
	Examiner	Art Unit	
	Caixia Lu	1713	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 July 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-118 is/are pending in the application.
- 4a) Of the above claim(s) 2,3 and 5-118 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 4 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>1/26/06</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 1 and 4 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The newly added limitation of an olefin polymer has "amorphous polymer segments and semi-crystalline polymer segments" in claim 1 is new matter. Applicants indicate that the "support for this amendment can be found on page 15, paragraph 53"; however, paragraph [0053] is located on page 17 which does not provide support for the amendment. Therefore, the newly added limitation of claim 1 is new matter.

It is also noted that the working examples such as Examples demonstrate the preparation of in situ olefin polymer blend by polymerized olefin monomers in the presence of a metallocene catalyst which provides amorphous polyolefin and a metallocene catalyst which provides crystalline polyolefin. However, "a polymer" is claimed rather than a polymer blend. Clarification is requested.

Claim Rejections - 35 USC § 102/103

1. Claims 1 and 4 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Zhou et al. (US 6,774,069) and Zhou et al. (US 2002/0123538) respectively for the same rationale as set forth in the previous Office action mailed January 19, 2006.

Response to Arguments

2. Applicant's arguments filed July 18, 2006 have been fully considered. The rejection over Karandinos et al. (US 6,747,114) is withdrawn in view of applicants' amendment and remark since Karandinos does teach or reasonably suggest a polymer blend comprising amorphous and semicrystalline polymers. However, the rejection over Zhou et al. (US 6,774,069) and Zhou et al. (US 2002/0123538) are maintained. Both Zhou teach hot-melt adhesive compositions comprising blend of an atactic polypropylene and an isotactic polypropylene. The adhesive polymers of the instant application appear to be in situ blends of amorphous and crystalline polymers according applicants' working examples because they are prepared in the presence of a metallocene catalyst which provides amorphous polyolefin and a metallocene catalyst which provides crystalline polyolefin. There it is the examiner's position if the olefin polymers of applicants' working examples exemplify the claimed "a polymer", the "a polymer" of the instant claims would be a polymer blend just like Zhou's polymer blends. Applicant indicates that the commercial Signa-Aldrich polymer propylene used in Zhou's examples is Ziegler-Natta polypropylene which is necessarily linear. This is contradictory to the commonly accepted fact that Ziegler catalyst in general provides

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olefin polymers with branches. The substantially linear olefin polymer can only be prepared in the presence of single site catalyst such as the metallocene catalyst rather than heterogeneous Ziegler catalyst.

However, applicants might overcome the rejections over Zhou by amending the claims as product-by-process claims since the in situ blend allow the amorphous and the crystalline polymer to be mixed at molecular level and, unavoidably, the macromers formed during the polymerization process would further copolymerize with the monomers in the system to provide branched polymers which provide the polymers with more profound branching.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Caixia Lu whose telephone number is (571) 272-1106. The examiner can normally be reached from 9:00 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful and the matter is urgent, the examiner's supervisor, David Wu, can be reached at (571) 272-1114. The fax numbers for the organization where this application or proceeding is assigned is (571) 273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-1700.



Caixia Lu, Ph. D.
Primary Examiner